

Push ship City Wed

Work Order ID 83013

83013

Page 1

Thursday, April 12, 2012 12:38:24 PM

Item ID: D3531-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bracket

Start Date: 4/12/2012 Start Qty: ~~6.00~~

6

Cust Item ID:

Required Date: 4/24/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date: *12-04-12* Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3531	Rev A								

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3531 Dwg Rev: *A* Prog Rev: *A* 2-

Debur if necessary

6061 .040

6 0 JM 12-5-9

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

6 0 JM 12-5-9

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

(6) WH 12.5.10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 83013

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Page 2

Thursday, April 12, 2012 12:38:24 PM

Item ID: D3531-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bracket
 Start Date: 4/12/2012 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 4/24/2012 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Brake NC Brake NC	NC BRAKE Memo Bend as per Dwg D3531	0.00 0.00				6	8		SP 4/05/14
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00		8/26/14		(46)			
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				(6)	26	125-14	

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Work Order ID 83013***83013***

Page 3

Thursday, April 12, 2012 12:38:24 PM

Item ID: D3531-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket

Start Date: 4/12/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 4/24/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location	0.00							
170									
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

6 0 12-5-14

6x

Pa/05/14

12/5/15

MF
12-05-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, April 12, 2012 12:38:28 PM

Page 1

Work Order ID: 83013

83013

Parent Item: D3531-1

D3531-1

Parent Item Name: Bracket

Start Date: 4/12/2012

Required Date: 4/24/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-09-24 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased	No			100	sf	352.5700	0.3783	2.389263			

M6061T6S 040

6061-T6 .040 Sheet

Location

Loc Qty

Loc Code

MAT021

352.57

121030

82.07

121099

270.5

121030

JM
12-5-9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	83013
Description: Bracket		Part Number:	D3531-1
Inspection Dwg: D3531	Rev: A	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.196	+0.005/-0.001	0.196	✓		Vern	HB-02
Ø0.129	+0.005/-0.001	0.129	✓		Vern	HB-02
0.33	+/-0.030	0.334	✓		Vern	HB-02
2.840	+/-0.010	2.844	✓		Vern	HB-02
1.70	+/-0.030	1.695 1.827	✓		Vern	HB-02
1.45	+/-0.030	1.453	✓		Vern	HB-02
0.38	+/-0.030	0.379	✓		Vern	HB-02
0.19	+/-0.030	0.19	✓		Vern	HB-02
5.88	+/-0.030	5.882	✓		Vern	HB-02
12.66	+/-0.030	12.66	✓		MT	HB-01
0.600	+/-0.010	0.607	✓		Vern	HB-02
1.77	+/-0.030	1.769	✓		Vern	HB-02
1.24	+/-0.030	1.246	✓		Vern	HB-02
1.16	+/-0.030	1.158	✓		Vern	HB-02

Measured by:	Jm
Date:	12-5-9

Audited by:	<i>[Signature]</i>
Date:	12-05-10

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.10.15	New Issue	KJ/EC/DD	<i>[Signature]</i>

W/O:		WORK ORDER CHANGES						
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

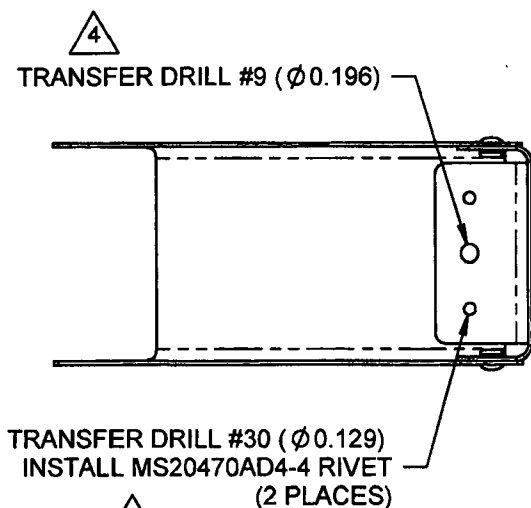
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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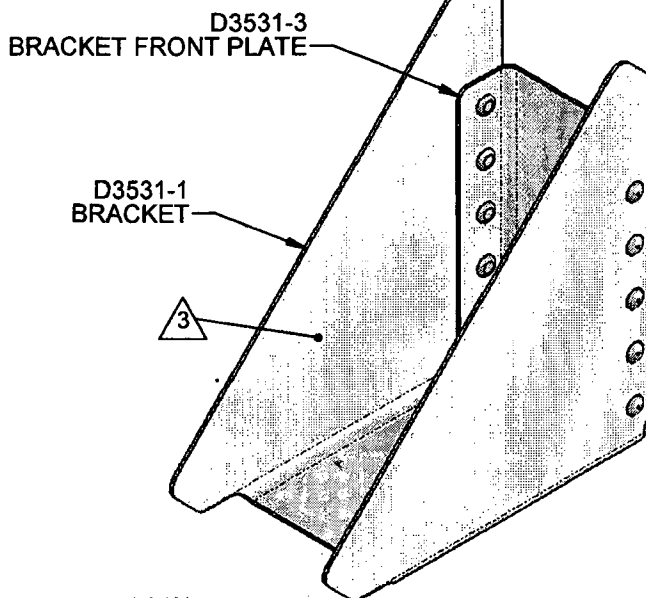
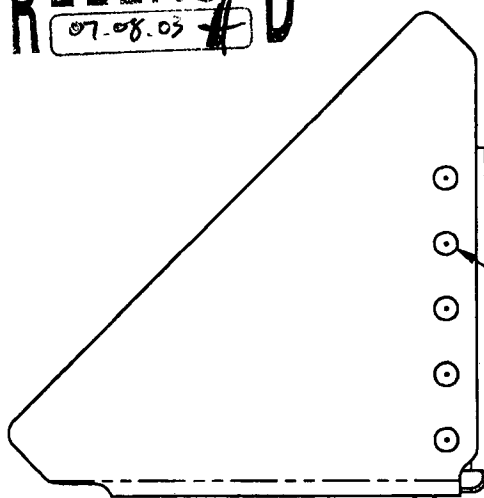
NOTE: Date & initial all entries



DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED HA	DRAWING NO. D3531	REV. A SHEET 1 OF 3
DATE 07.06.19	TITLE BRACKET ASSEMBLY		SCALE 1:2
REV A	DATE 07.06.19	DESCRIPTION NEW ISSUE	



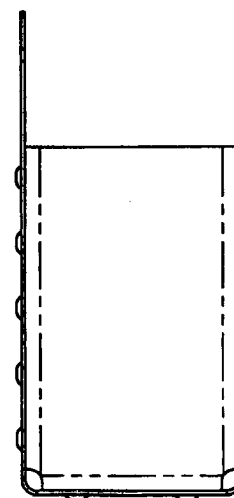
RELEASED
07-08-03



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 83013

MS20470AD4-4
(10 PLACES)

11204-12



D3531-041 BRACKET ASSEMBLY

NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY BLACK
SANDTEX (4.3.5.7) PER DART QSI 005 4.3
ALL PARTS
- 2) ASSEMBLE PER DART QSI 003
- 3) IDENTIFY WITH DART P/N "D3531-041" USING
WHITE MARKER ON INSIDE OF BRACKET
ASSEMBLY, WHERE INDICATED
- 4) TRANSFER DRILL HOLES FROM D3531-1 BRACKET
THROUGH D3531-3 BRACKET FRONT PLATE
BEFORE FINISHING

PARTS LIST

QTY.	P/N	DESCRIPTION
X	D3531-041	BRACKET ASSEMBLY
1	D3531-1	BRACKET
1	D3531-3	BRACKET FRONT PLATE
12	MS20470AD4-4	RIVET

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DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

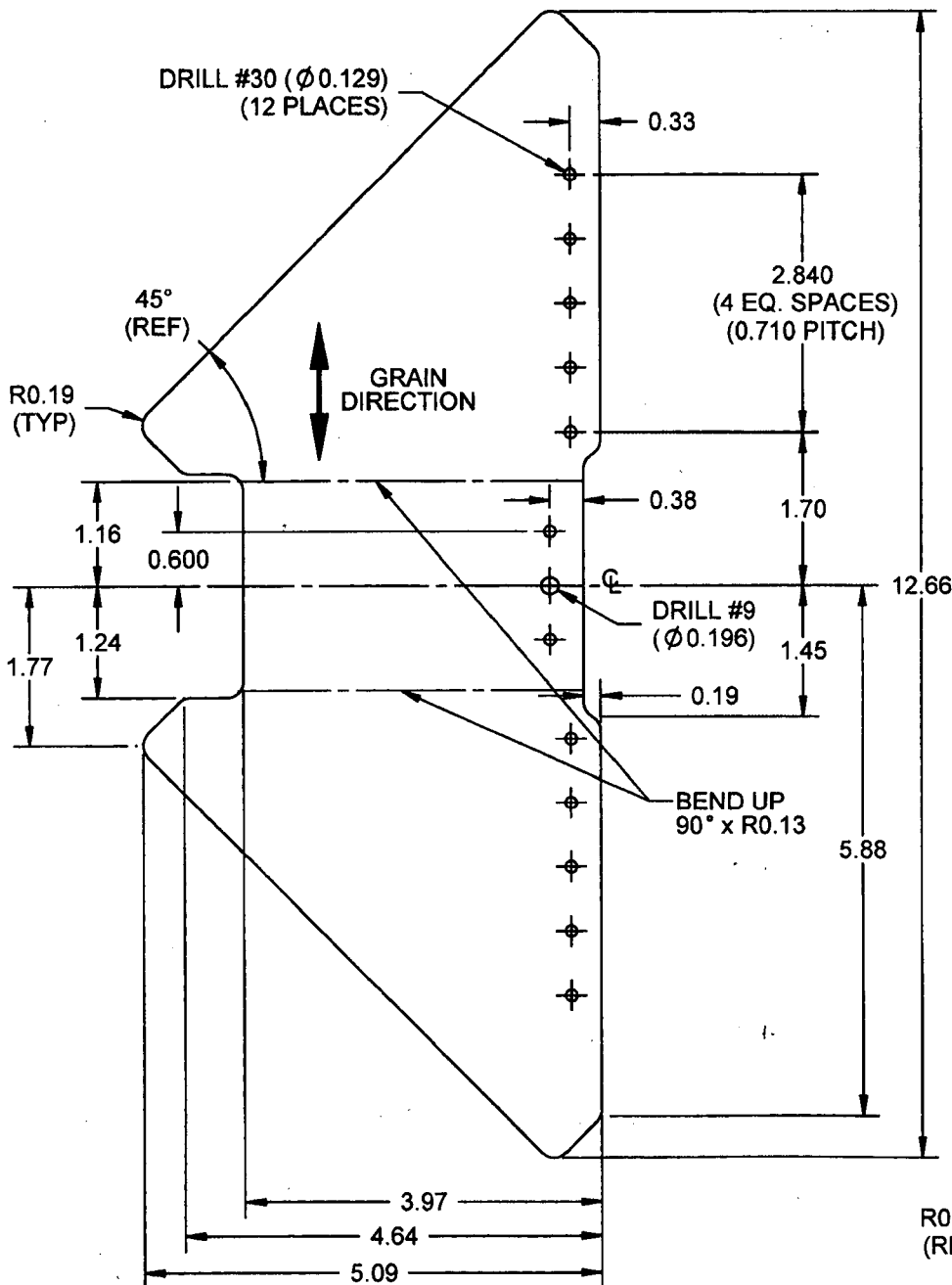
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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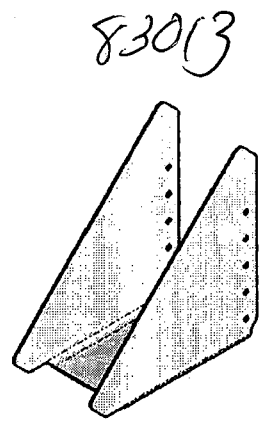
NOTE: Date & initial all entries



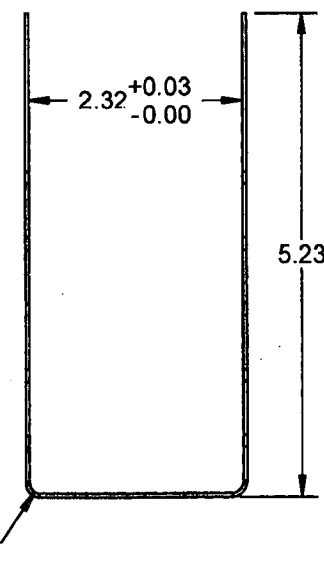
DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D3531	REV. A SHEET 2 OF 3
DATE 07.06.19	TITLE BRACKET ASSEMBLY		SCALE 1:2



D3531-1F FLAT PATTERN



RELEASED
07-08-03



D3531-1 BRACKET

NOTES:

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

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DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

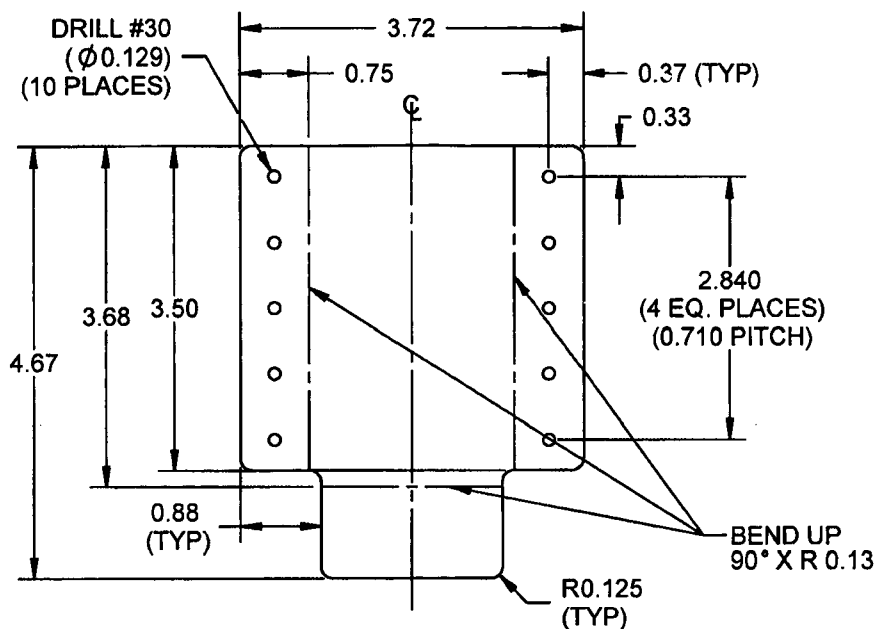
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

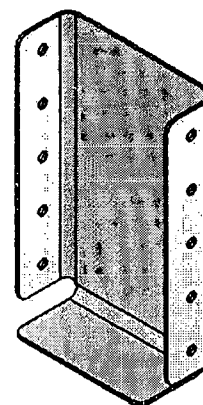


DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED #	DRAWING NO. D3531	REV. A
DATE 07.06.19	TITLE BRACKET ASSEMBLY		SHEET 3 OF 3 SCALE 1:2

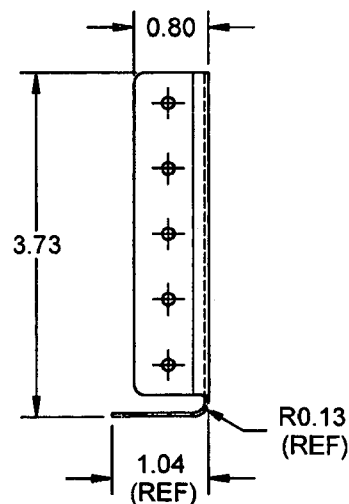
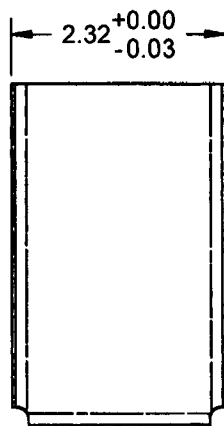


D3531-3F FLAT PATTERN

RELEASED
07.08.03 #



83013



D3531-3 BRACKET FRONT PLATE

NOTES:

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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